

What is Claimed is:

1. An evaluation system for evaluating media, the system comprising:
sensing means for sensing properties of media including the location of any
imperfection in the media; and
an evaluation module for evaluating imperfections in the media, the
evaluation module comprising an artificial neural network and a fuzzy system.
2. A system according to claim 1, wherein the evaluation module includes a
classifier including first evaluating means for evaluating any imperfections in one or more
predefined critical locations on the media and generating a first damage value, second
evaluating means for evaluating any imperfections in any non-critical locations on the media
and generating a second damage value, and combining means for combining the first and
second damage values to generate a single damage index.
3. A system according to claim 2, wherein the first evaluating means comprises a
fuzzy system, and the second evaluating means comprises an artificial neural network.
4. A system according to claim 2, wherein the evaluation module includes a
plurality of classifiers, and a second level classifier for receiving the single damage index
from each classifier and for generating a suitability index therefrom.

5. A method of evaluating media, the method comprising the steps of:

sensing properties of media including the location of any imperfection in the media;

evaluating any imperfections in one or more predefined critical locations on the media;

generating a first damage value based on the imperfections in the critical locations;

evaluating any imperfections in any non-critical locations on the media;

generating a second damage value based on the imperfections in the non-critical locations; and

combining the first and second damage values to generate a single damage index.

6. An evaluation module for coupling to a sensing arrangement, the evaluation module comprising:

a classifier including first evaluating means for evaluating any imperfections in one or more predefined critical locations on the media and generating a first damage value, second evaluating means for evaluating any imperfections in any non-critical locations on the media and generating a second damage value, and combining means for combining the first and second damage values to generate a single damage index.

7. An evaluation module according to claim 6, further comprising a number of classifiers, and a second level classifier for receiving the single damage index from each classifier and for generating a suitability index therefrom.

8. An evaluation module for coupling to a sensing arrangement, the evaluation module comprising:

evaluating means comprising an artificial neural network and a fuzzy system.

9. A method of evaluating media, the method comprising the steps of:

sensing the media;

detecting one or more physical imperfections in the media;

determining properties of each of the imperfections in the media;

generating a damage index associated with each imperfection based on the determined properties; and

generating a single suitability index based on a combination of each damage index.

10. A method of evaluating media, the method comprising the steps of:

sensing the media;

detecting at least one physical imperfection in the media;

determining properties of each imperfection in the media;

generating a damage index associated with each imperfection based upon the determined properties of the imperfection; and

generating a single suitability index based upon a combination of each damage index.